

# Department of Fish and Game

DIVISION OF COMMERCIAL FISHERIES Westward Region Office

October 31, 2017

Alaska Peninsula

Salmon Season Summary

and Aleutian Islands

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# **MEMORANDUM**

DATE:

**Bowers** 

TO: Nick Sagalkin

Regional Supervisor

Division of Commercial Fisheries, Region IV

THRU: Jeff Wadle SUBJECT:

> Regional Finfish Management Biologist Division of Commercial Fisheries, Region IV

FROM: Bob Murphy, Lisa Fox,

cc:

Cotten

Reid Johnson, Colton Lipka, Lucas Stumpf

Division of Commercial Fisheries

Region IV - Kodiak

Schaberg Foster **Templin Brazil** Dorner Jackson Wilburn Linderman Olson

Salomone Wattum Buck Polum Elison Fall Menard Sands **Pappas** 

Kelley

**USF&WS OSM** Sand Point AC **USF&WS King Salmon** Nelson Lagoon AC False Pass AC King Cove AC **Dutch Harbor AC** Kodiak AC Chignik AC Aleutians East Borough City of Unalaska City of Sand Point City of False Pass

City of King Cove City of Port Heiden Pen. Setnetters Assoc. Concerned Area M Fishermen Bristol Bay Driftnetters Assoc.

**CRAA** Lake and Pen Borough

Peninsula Marketing Assoc. Peter Pan Seafoods **Trident Seafoods** Bering Pacific Seafoods

The following is an overview of the 2017 Alaska Peninsula, Aleutian Islands, and Atka-Amlia Islands areas (Figure 1) commercial salmon fishing season. Total harvest presented from the 2017 commercial salmon fishing season should closely approximate final harvest numbers for all species. The 2017 commercial salmon harvest in the Alaska Peninsula, Aleutian Islands, and Atka-Amlia Islands Management areas totaled 12,683 Chinook, 7,103,315 sockeye, 358,967 coho, 21,830,532 pink, and 2,031,987 chum salmon (Table 1). Subsistence salmon harvest will be reported in the 2017 annual management report (AMR). Data detailed in this report are considered preliminary. Preliminary exvessel value of salmon harvested in Area M totaled \$66,157,606 (Table 2). Exvessel value information was generated from fish tickets and does not include postseason adjustments paid to fishermen.

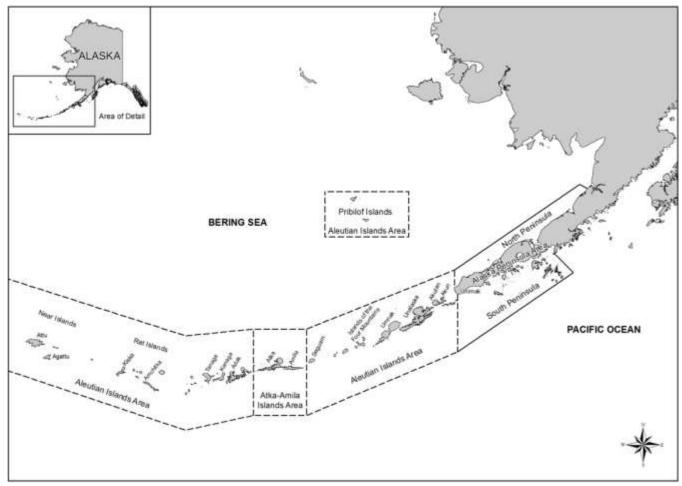


Figure 1.-Map of the Aleutian Islands, Atka-Amlia Islands, and Alaska Peninsula Management areas.

Table 1.–Alaska Peninsula, Aleutian Islands, and Atka-Amlia Islands commercial salmon harvest, 2017.

	Number of fish						
Location	Chinook	Sockeye	Coho	Pink	Chum	Total	
South Peninsula	9,666	3,216,088	348,332	21,819,104	1,948,471	27,341,661	
North Peninsula	3,017	3,887,227	10,635	11,428	83,516	3,995,823	
Aleutian Islands	0	0	0	0	0	0	
Atka-Amlia Islands	0	0	0	0	0	0	
Total	12,683	7,103,315	358,967	21,830,532	2,031,987	31,337,484	

Table 2.-Preliminary commercial ex-vessel values by fishery and species, 2017.

				Value		
Location	Chinook	Sockeye	Coho	Pink	Chum	Total
S. Unimak-Shumagin June Fishery	\$61,443	\$16,576,508	\$682,152	\$16,402,372	\$3,564,148	\$37,286,623
Southeastern District Mainland Fishery (June 1 – July 25)	\$833	\$547,059	\$351	\$4,204	\$11,107	\$563,555
South Peninsula Post-June Fishery	\$487	\$882,536	\$37,804	\$4,008,917	\$380,256	\$5,309,999
Total	\$62,762	\$18,006,103	\$720,308	\$20,415,493	\$3,955,511	\$43,160,177
Northwestern District	\$217	\$497,635	\$276	\$3,307	\$122,376	\$623,811
Northern District	\$79,564	\$22,225,445	\$21,642	\$0	\$46,966	\$22,373,617
Total	\$79,782	\$22,723,080	\$21,918	\$3,307	\$169,342	\$22,997,429
Aleutian Islands Total	\$0	\$0	\$0	\$0	\$0	\$0
Atka-Amlia Islands Total	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$142,543	\$40,729,183	\$742,226	\$20,418,800	\$4,124,853	\$66,157,606

Note: Due to rounding of cents, totals may differ by small amounts.

# South Alaska Peninsula

# South Unimak and Shumagin Islands June Fisheries

The South Unimak and Shumagin Islands commercial salmon fishery began on June 7 for set gillnet gear and on June 10 for seine and drift gillnet gear. There were four 88-hour and one 64-hour fishing periods for set gillnet gear and four 88-hour fishing periods for seine and drift gillnet gear. The

commercial salmon harvest for the June fishery consisted of 4,955 Chinook, 1,954,409 sockeye, 43 coho, 1,714,307 pink, and 640,488 chum salmon (Table 3).

Table 3.—Total June salmon harvests in numbers of fish for the South Unimak and Shumagin Islands fisheries, excluding home pack, 2017.

	Number of salmon						
	Chinook	Sockeye	Coho	Pink	Chum	Total	
South Unimak	948	1,071,043	6	396,022	179,485	1,647,504	
Shumagin Islands	4,007	883,366	37	1,318,285	461,003	2,666,698	
Total	4,955	1,954,409	43	1,714,307	640,488	4,314,202	

Consistent with the Board of Fisheries regulatory changes from the February 2016 meeting, commercial salmon fishing was closed in the West Pavlof Bay Section south of Black Point and the Volcano Bay Section on July 22 when the sockeye salmon harvest exceeded 191,000 fish as shown by fish ticket information. The "Dolgoi Island Area" (Figure 2) remained closed through July 25; however, the portion of the West Pavlof Bay Section south of Black Point reopened to commercial salmon fishing on July 17 concurrent with scheduled fishing periods during the post-June fishery. Beginning July 26, the "Dolgoi Island Area" was managed consistent with the scheduled fishing periods during the post-June fishery.

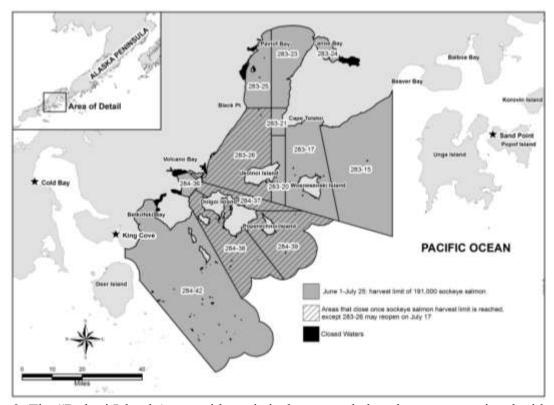


Figure 2. The "Dolgoi Island Area" with statistical areas and closed waters associated with 2016 Board of Fisheries regulatory changes.

#### **Southeastern District Mainland Fisheries**

From June 1 to July 25, the Southeastern District Mainland (SEDM; excluding the Northwest Stepovak Section (NWSS) beginning July 1) is managed based on the strength of the Chignik sockeye salmon run. During years in which it appears that sockeye salmon harvest will be greater than 600,000 fish in the Chignik Management Area (CMA), and the first run begins to develop as anticipated, followed by a commercial salmon opening in the CMA, commercial salmon fishing can be allowed in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay and Beaver Bay sections of the SEDM. The first commercial salmon opening in the SEDM was for 48 hours beginning on June 13 and the second 48-hour opening occurred on June 17, which was extended for 48-hours on June 19. A total of 34 Chinook, 54,662 sockeye, 0 coho, 1,475 pink, and 1,599 chum salmon were harvested during the allocation period (June 1 – July 25; Table 4).

Beginning July 1, the Northwest Stepovak Section (NWSS) of SEDM is managed on the strength of the Orzinski Lake sockeye salmon run. The Orzinski Lake sockeye salmon escapement of 20,989 fish exceeded the sustainable escapement goal (SEG) of 15,000–20,000 sockeye salmon. The first commercial fishing period in the NWSS began on July 8. The total harvest in the NWSS from July 1 through July 25 was 5 Chinook, 39,256 sockeye, 154 coho, 4,002 pink, and 3,474 chum salmon (Table 4).

From July 26 through August 31, the SEDM is managed based on the abundance of local salmon stocks. Due to very strong returns of pink salmon into SEDM streams, fishing periods during August and September were the maximum allowed by regulation (closed for 36 hours within a 7 day period, open all other times beginning August 5). The total harvest in SEDM from July 26 through September 30 for the 2017 season was 60 Chinook, 106,438 sockeye, 11,536 coho, 2,277,687 pink, and 106,750 chum salmon (Table 4).

From June 1 through July 25, 80% of the sockeye salmon harvested in the SEDM are considered to be Chignik bound, excluding the Northwest Stepovak Section beginning July 1. Through the end of the 2017 allocation period, SEDM sockeye salmon harvest considered Chignik bound totaled 6.44% of the CMA harvest through July 25.

Table 4.-Preliminary Southeastern District Mainland salmon harvest, excluding home pack, 2017.

	Number of Salmon				
Location	Chinook	Sockeye	Coho	Pink	Chum
June 1–June 30	34	54,662	0	1,475	1,599
July 1–July 25 SEDM <sup>a</sup>	0	0	0	0	0
Total SEDM harvest in allocation	34	54,662	0	1,475	1,599
July 1–July 25 NWSS <sup>b</sup>	5	39,256	154	4,002	3,474
July 26–September 30	60	106,438	11,536	2,277,687	106,750
Total	133	255,018	11,690	2,284,639	113,422

<sup>&</sup>lt;sup>a</sup> Southeastern District Mainland (excluding Northwest Stepovak Section).

<sup>&</sup>lt;sup>b</sup> Northwest Stepovak Section

# **South Peninsula Post-June Fishery**

Prior to the South Peninsula Post-June fishery, the department conducts a test fishery to determine immature salmon abundance in the Shumagin Islands. Test fishing occurred on July 2, 3, 5, 9, 12, 13 and 16. Test fisheries on July 2, 3, 5, and 9 resulted in an average of 533, 348, 584, and 249 immature salmon per set, respectively. The test fisheries on July 12 and 13 resulted in an average of 373 and 169 immature salmon per a set, respectively. As a result, the seine fleet was closed to commercial salmon fishing in the Shumagin Island Section of the Southeastern District during the periods that were scheduled to occur on July 6, July 10, and July 14. The final test fishery, which occurred on July 16, resulted in an average of 84 immature salmon per set. Reduced harvest of immature salmon on July 16 allowed for the Shumagin Island Section to open to seine gear for the July 18 commercial salmon fishing period.

From July 6 through July 31, there was one 33-hour fishing period, followed by a 63-hour closure, followed by six 36-hour fishing periods, separated by 60-hour closures. During August, the Post-June fishery is managed based on the abundance of local pink and chum salmon stocks. In September and October, management focuses on coho salmon returns, though the status of late pink and chum salmon returns may also be taken into consideration. The very high number of pink and chum salmon returning to local streams resulted in extensive commercial fishing opportunity in the South Peninsula during August. Above average coho salmon harvest in September along with continued large numbers of pink and chum salmon allowed for continuous commercial fishery openings until participation in the fishery ceased.

The total commercial harvest for the South Peninsula Post-June fishery (including the SEDM from July 26–October 31) was 4,672 Chinook, 1,164,150 sockeye, 348,135 coho, 20,099,320 pink, and 1,302,507 chum salmon (Table 5).

Table 5.—Post-June South Peninsula commercial salmon harvest, excluding home pack, 2017.

		Number of salmon					
Location	Chinook	Sockeye	Coho	Pink	Chum		
South Peninsula Post-June harvest	4,612	1,057,876	336,618	17,821,633	1,195,757		
Post-June SEDM harvest (July 26– October 31)	60	106,274	11,517	2,277,687	106,750		
Total Post-June harvest	4,672	1,164,150	348,135	20,099,320	1,302,507		

# **South Peninsula Escapement**

The South Peninsula sockeye salmon escapement of 106,542 fish (Table 6) was above the management objective range of 48,200–86,400 fish; and escapement into Mortensens Lagoon (15,500 fish) exceeded its SEG range of 3,200–6,400 fish. Escapement into Thin Point Lagoon (39,300 fish) was above the SEG range of 14,000–28,000 fish. Pink salmon total indexed escapement of 5,663,637 fish (Table 6) was well above the SEG range of 1,750,000–4,000,000 fish. Chum salmon indexed total escapement of 1,773,626 fish (Table 6) was also well above the cumulative district escapement goal range of 330,400–

660,800 fish. There were 5,100 coho salmon observed in South Peninsula streams (Table 6). Some of the major coho salmon systems are typically not surveyed or surveyed during off-peak times. A lack of escapement information for coho salmon is due to the departure of management staff from the South Peninsula region prior to peak coho salmon runs and poor weather conditions preventing aerial surveys from being conducted during peak coho salmon runs.

Table 6.—South Peninsula indexed salmon escapement by species and year, 2008–2017.

		N	Number of Salmon		_
Year	Chinook	Sockeye	Coho	Pink	Chum
2008	0	95,859	19,600	3,338,370	591,950
2009	0	128,117	108,855	3,067,000	512,230
2010	0	38,039	260	742,912	291,912
2011	0	59,794	3,100	2,494,950	497,725
2012	0	55,900	7,910	478,910	205,242
2013	0	31,386	0	2,320,790	502,600
2014	0	38,120	9,050	1,340,380	313,545
2015	0	88,010	2,320	7,820,800	906,420
2016	0	120,170	0	1,038,160	626,776
2017	0	106,542	5,100	5,663,637	1,773,626
2012–2016 Average	0	66,717	3,856	2,599,808	510,917

# **Aleutian Islands Fishery and Escapement**

The Aleutian Islands Area may open to commercial salmon fishing by emergency order if adequate escapement is observed and there is interest from the fishing industry. During an aerial survey of the Aleutian Islands in early August, an adequate amount of pink salmon (approximately 960,000 fish) were observed in streams. The abundance of pink salmon in the Unalaska Area would have allowed for a commercial salmon fishery to occur in 2017; however, lack of industry interest resulted in no commercial openings announced. Late run timing and low numbers of sockeye salmon escaping into McLees Lake resulted in restricted subsistence fishing to outside 500 yards from the stream mouth from July 10 until July 22. McLees Lake had a sockeye salmon escapement of 13,195 fish and was within the SEG range of 10,000–60,000 sockeye salmon.

## North Alaska Peninsula

## **Commercial Harvest**

In 2017, 162 Area M permit holders participated in commercial salmon fisheries along the North Alaska Peninsula (Figure 3). There was no effort by Area T permit holders. The number of Area M permit holders participating in 2017 was far below the historical numbers observed during the 1990s.

The North Alaska Peninsula fishery is predominantly a sockeye salmon fishery; although, depending on market conditions, directed Chinook, coho, and chum salmon fisheries occur in some locations. During

even-numbered years, depending on market conditions, pink salmon runs are frequently targeted in the Northwestern District.

During early August a fire disabled the sole shore-based processor located in Port Moller on the North Alaska Peninsula. As a result, the late run of sockeye salmon at Bear River (which traditionally starts August 1) was not targeted for most of the run as typically occurs, and neither was the coho salmon run at Nelson Lagoon, which is traditionally targeted beginning August 15. About 3 weeks of fishing time was lost by the North Peninsula fleets due to the fire. Prior to the fire, harvest on the North Peninsula was on track to be the largest sockeye salmon harvest on record, and escapements at all local river systems had either been met or, more often, far exceeded.

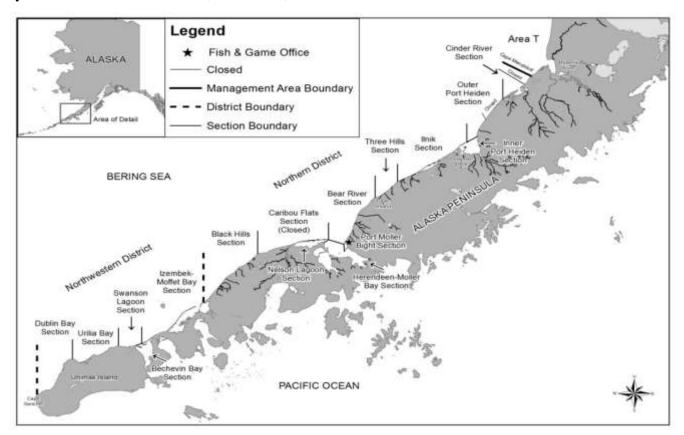


Figure 3.– Alaska Peninsula with North Alaska Peninsula commercial salmon fishing districts depicted.

In 2017, the harvest of sockeye and Chinook salmon on the North Peninsula exceeded projected harvest levels, while the harvest of coho, pink, and chum salmon were below projected harvest levels. The North Alaska Peninsula harvests of Chinook and sockeye salmon were above the previous 10-year (2007–2016) averages for each species, while the harvest of coho, pink, and chum salmon were below the 10-year averages (Table 7).

Table 7.—The total 2017 North Alaska Peninsula commercial salmon harvest, excluding home pack and department test fishery, and 2017 projected harvest and 2007–2016 average harvest.

_	Number of salmon					
	Chinook	Sockeye	Coho	Pink	Chum	
2017 season total	3,017	3,887,227	10,635	11,428	83,516	
Projected harvest	2,000	2,400,000	100,000	25,000	150,000	
2007–2016 average	2,501	2,067,287	64,624	59,332	184,060	

## **Northwestern District**

In the 2017 Northwestern District commercial salmon fishery, a total of 16 Chinook, 89,360 sockeye, 143 coho, 5,050 pink, and 57,855 chum salmon were harvested (Table 8). A total of 16 permit holders participated in the fishery, consisting of 4 purse seiners and 12 drift gillnetters.

Table 8.–Northwestern District commercial salmon harvest, excluding home pack and department test fishery, by section, all gear combined, 2017.

	Number of salmon				
Location	Chinook	Sockeye	Coho	Pink	Chum
Dublin Bay Section	0	0	0	0	0
Urilia Bay Section	1	63,678	19	2,126	892
Swanson Lagoon Section	0	0	0	0	0
Bechevin Bay Section	0	0	0	0	0
Izembek-Moffet Bay Section	15	25,682	124	2,924	56,963
2017 Northwestern District Total	16	89,360	143	5,050	57,855
2007–2016 NW District Average	13	40,383	1,448	55,689	122,292

In the Northwestern District, the chum salmon escapement of 195,700 fish (Table 9) was within the chum salmon SEG of 100,000–215,000 fish. This escapement estimate represents a minimum; the actual escapement was likely greater due to poor survey conditions in one of the major chum salmon producing streams in the Northwestern District. The sockeye salmon escapement for 2017 in the Northwestern District was above the escapement goal range of 52,600–106,000 with a total escapement of 307,962 fish (Table 9).

Table 9.-Northwestern District salmon escapement by species and section, 2017.

	Number of salmon				
Location	Chinook	Sockeye	Coho	Pink	Chum
Urilia Bay Section	0	295,500	0	0	0
Swanson Lagoon Section	0	860	0	0	0
Bechevin Bay Section	0	602	0	249,215	90,900
Izembek-Moffet Bay Section	0	11,000	2,000	62,500	104,800
Northwestern District Total	0	307,962	2,000	311,715	195,700

#### **Black Hills Section**

Due to the lack of extensive closures during 2017 in the Bear, Three Hills, and Ilnik sections in the Northern District, effort by the drift gillnet fleet in the Black Hills Section (Figure 3) was limited. A total of 15,822 sockeye salmon (Table 10) and 2,966 chum salmon were harvested in the Black Hills Section in 2017. Weekly fishing periods occurred throughout the season in the Black Hills Section. North Creek is the only system in the Black Hills Section with a sockeye salmon escapement goal. The 2017 North Creek salmon escapement of 5,800 sockeye salmon (determined by aerial surveys) met the escapement goal of 4,400–8,800 fish.

Table 10.—North Alaska Peninsula sockeye salmon commercial harvest, excluding home pack and department test fishery, by statistical area or combination of statistical areas, 2017.

Area <sup>a</sup>	Sockeye salmon harvest	Percent of total
Northwestern Dist	rict	
311-20 Dublin Bay, 311-32 Urilia Bay, 311-52 Swanson Lagoon	63,678	1.64
311-60 Bechevin Bay <sup>b</sup>	0	0
312-20 Izembek Lagoon, and 312-40 Moffet Bay	17,578	0.45
311-58, 312-10 Outside Izembek-Moffet	8,104	0.21
Northwestern District total	89,360	2.30
Northern Distric	t	
313-10 Black Hills Section	15,822	0.41
313-30 Nelson Lagoon Section	347,562	8.94
314-20, 314-30 Herendeen-Moller bays <sup>b</sup>	0	0
314-12, 315-11 Bear River and Port Moller Bight	232,426	5.98
315-20 NE Bear River	89,978	2.31
Bear River total (314-12,315-11,315-20)	322,404	8.29
316-10 Three Hills Section	91,307	2.35
316-20 Ilink SW of Unangashak Bluffs	1,156,035	29.74
316-25 Ilnik NE of Unangashak Bluffs	1,362,206	35.04
Ilnik Section total (316-20,316-22,316-25)	2,518,241	64.78
317-20 Inner Port Heiden Section <sup>b</sup>	0	0
317-10 Outer Port Heiden Section	502,531	12.93
318-20 Cinder River Section <sup>c</sup>	-	-
Cinder River and Port Heiden total (317-20,317-10,318-20)	502,531	12.93
Northern District total	3,797,867	97.70
North Peninsula total	3,887,227	100.00

<sup>&</sup>lt;sup>a</sup> Some statistical areas are combined because the low number of participants makes the information confidential.

b No effort occurred in 2017.

<sup>&</sup>lt;sup>c</sup> Confidentiality requirements prohibit reporting of harvest.

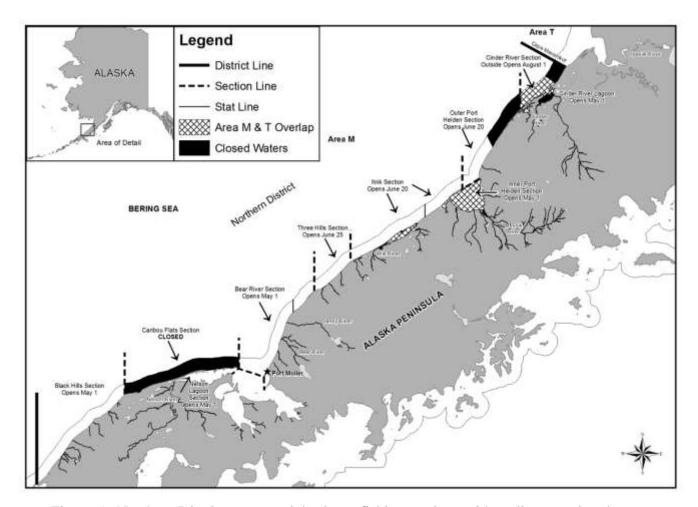


Figure 5.–Northern District commercial salmon fishing sections with earliest opening dates depicted.

# **Nelson Lagoon Section**

The Nelson (Sapsuk) River (Figure 5) total run of 728,562 sockeye salmon (includes harvest and escapement) was above the estimated forecast of 585,000 sockeye salmon. From the total run, 347,562 sockeye salmon were harvested in Nelson Lagoon (Table 10) and 381,000 fish escaped (Table 11) in the Nelson River. The 2017 sockeye salmon escapement into Nelson River exceeded the biological escapement goal (BEG) of 97,000–219,000 fish (Table 11).

The Nelson Lagoon Section was opened for all weekly fishing periods along with many extensions in fishing time in 2017. Beginning August 15, the Nelson Lagoon Section is managed on local coho salmon runs. In 2017, 19,000 coho salmon were observed in Nelson River escapement exceeding the Nelson River SEG threshold of 18,000 fish. A fire occurred at the sole processing facility that bought coho salmon from Nelson Lagoon in early August, resulting in no directed coho salmon fishery occurring in 2017.

Table 11.-North Alaska Peninsula sockeye salmon escapements and goals, 2017.

	Escapement a	Goal
Nelson (Sapsuk) River	381,000	97,000–219,000
Sandy River	145,000	34,000–74,000
Ilnik River	238,000	40,000–60,000
Bear Lake early run	570,840	176,000–293,000
Bear Lake late run	229,160	117,000-195,000
Bear Lake Total	800,000	293,000–488,000
Subtotal for systems with weirs	1,564,000	472,000-853,000
Subtotal for systems without weirs	801,807	119,400–254,800
North Peninsula Total	2,365,807	583,400-1,095,800

<sup>&</sup>lt;sup>a</sup> Includes an estimate of sockeye salmon after removal of the weirs.

#### **Bear River and Three Hills Sections**

By regulation, the Bear River Section (Figure 5) opens to commercial salmon fishing on May 1 while the Three Hills Section opens June 25. Both areas are managed based on the sockeye salmon run strength into Bear and Sandy rivers. Both the early- and late-runs of sockeye salmon at Bear River were above average, extensive closures during the season were not necessary. During the fishing season large closed water buffers were utilized around streams when needed in order to ensure adequate escapement. A total of 322,404 sockeye salmon were harvested in the Bear River Section during 2017, and 91,307 sockeye salmon were harvested in the Three Hills Section (Table 10).

The Bear River early-run (through July 31) sockeye salmon escapement of 570,840 fish exceeded the escapement goal of 176,000–293,000 fish (Table 11). The Bear River late-run (after July 31) sockeye salmon escapement of 229,160 fish exceeded the late-run escapement goal of 117,000–195,000 fish. The Bear River season sockeye salmon escapement was 800,000 fish (Table 11), which far surpassed the combined early- and late-run escapement goal of 293,000–488,000 fish.

The 2017 Sandy River sockeye salmon escapement of 145,000 fish (Table 11) exceeded the season ending escapement goal range of 34,000–74,000 fish, and was the second largest escapement on record.

## **Ilnik Section**

In 2017 the Ilnik River system sockeye salmon escapement through the weir was 238,000 fish, exceeding the Ilnik River escapement goal of 40,000–60,000 fish and was the largest escapement on record. The observed escapement into the Ocean River (a major tributary of the Ilnik River) was 85,000 fish, which exceeded the escapement goal of 8,000–12,000 fish. The total Ilnik River system sockeye salmon escapement of 238,000 fish is inclusive of the Ocean River escapement of 85,000 fish. By regulation, the Ilnik Section can open to commercial salmon fishing on June 20. Sockeye salmon escapement into Ilnik River exceeded interim escapement objectives throughout the season. A total of

2.5 million sockeye salmon were harvested in the Ilnik section, well above average, and the highest on record (Table 10). No commercial fishing effort occurred in Ilnik Lagoon in 2017 despite weekly fishing periods.

Beginning August 15, the Ilnik Section is managed for coho salmon runs into Ilnik Lagoon, however due to the processor fire in mid-August no market existed for coho salmon during the 2017 fishing season. All coho salmon harvested in the Ilnik Section were incidental to targeted sockeye salmon fisheries.

## **Inner and Outer Port Heiden Sections**

Aerial escapement surveys of the Meshik River began on June 16. Subsequent surveys occurred throughout the season and the final sockeye salmon escapement into the Meshik River system was 191,725 fish, far exceeding the escapement goal of 48,000–86,000 sockeye salmon. This includes escapement into the Meshik River and tributaries, as well as Red Bluff and Yellow Bluff creeks.

Fishing time in the Outer Port Heiden Section (Figure 5) is based on Meshik River sockeye salmon abundance unless management actions are taken for the conservation of Ugashik River sockeye salmon in the Egegik District. By regulation, the Outer Port Heiden Section can be open to commercial salmon fishing from June 20 to July 31. The weekly fishing periods in the Outer Port Heiden Section are scheduled from 6:00 a.m. Monday to 6:00 p.m. Wednesday. The Outer Port Heiden Section opened on June 25 and had openings of no more than  $2\frac{1}{2}$  days per week until the section closed on July 31. In 2017, a total of 502,531 sockeye salmon (Table 10) were harvested from the Outer Port Heiden Section.

#### **Cinder River Section**

In 2017 the commercial fishing effort in the Cinder River Section was minimal, despite weekly fishing periods of 2½ days per week for the entire season. Effort in 2017 in the Cinder River Section targeted coho salmon, and the fishery was open continuously due to low effort. Confidentiality rules prohibit the reporting of the Cinder River Section harvest because of the low effort. The total Cinder River (including Mud Creek) sockeye salmon escapement estimate of 234,800 fish exceeded the escapement goal of 36,000–94,000 fish and was the largest on record.

# **Northern District Escapement**

# **Chinook Salmon**

Nelson River is the only river in Area M with a Chinook salmon escapement goal. At the Nelson River weir a total of 1,502 Chinook salmon escaped, and was below the goal of 2,400–4,400 fish. The total Northern District Chinook salmon escapement of 7,623 fish was below the most recent ten-year average of 13,826 fish.

## **Chum Salmon**

The Northern District has a district wide chum salmon escapement goal of 119,600–239,200 fish. This goal was met with an escapement of 233,240 fish, which is above the most recent ten-year average of 180,439 fish. The bulk of the chum salmon escapement occurred in the Herendeen-Moller Bay Section (71,400 fish) and the Inner Port Heiden Section (64,200 fish).

#### Coho Salmon

Coho salmon surveys were done on all Northern District streams in late August which is a week to 10 days earlier than the surveys usually occur. Early surveys were done because management staff left Port Moller earlier than planned due to the cannery fire; fishing operations ceased three weeks earlier than usual and because the ADF&G office in Port Moller, which relies on power from the processor, lost power. Coho salmon runs continue through September, so escapements tabulated from aerial surveys are considered minimum estimates. Both the Nelson and Ilnik rivers have coho salmon lower bound escapement goals in the Northern District. The Nelson River escapement of 19,000 coho salmon met the lower bound escapement goal of 18,000 fish. A total of 6,000 fish were observed at the end of August in the Ilnik River in 2017, which did not meet the lower bound escapement goal of 9,000 fish. Like Nelson River, it is expected that more coho salmon entered the system beginning in September. The coho salmon escapement into the Cinder River was 20,000 fish, and 44,000 coho salmon escaped into the Meshik River system (Meshik River and Landlocked Creek) as observed by aerial survey during late August.